

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.

VA0022985

Effective Date:

July 6, 2013

Expiration Date:

June 5, 2018

AUTHORIZATION TO DISCHARGE UNDER THE

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with thispermit cover page, Parts I and II of this permit as set forth herein.

Owner Name:

Town of Stuart

Facility Name:

Town of Stuart WWTP

City:

Stuart

County:

Patrick

Facility Location: 709 Commerce Street, Stuart, Virginia

The owner is authorized to discharge to the following receiving stream:

Stream

South Mayo River

River Basin:

Roanoke River

River Subbasin:

Roanoke River

Section:

3g

Class:

IV

Special Standards: None

Robert J. Weld

Blue Ridge Regional Office

Regional Office Director

A. <u>Limitations and Monitoring Requirements</u>

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall number 001. This discharge shall be limited and monitored as specified below:

| | | DISCHARGE LIMIT | <u> FATIONS</u> | | MONITORING R | REQUIREMENTS |
|--|------------------------------------|--------------------|-----------------|------------------|---|------------------|
| Effluent Characteristic | Monthly Average | Weekly Average | <u>Minimum</u> | <u>Maximum</u> | Frequency | Sample Type |
| Flow (MGD) ^b | NL | NA | NA | NL | Continuous | TIRE |
| pH (Standard Units) | NA | NA | 6.0 | 9.0 | 1/Day | Grab |
| $BOD_5^{\mathfrak{c},\mathrm{f}}$ | 24 mg/L 55 kg/d | 36 mg/L 82 kg/d | NA | NA | 1/Week | 8 Hour Composite |
| Total Suspended Solids ^{c,d,f} | 30 mg/L 68 kg/d | 45 mg/L 100 kg/d | NA | NA | 1/Week | 8 Hour Composite |
| Total Residual Chlorine ^{b,d} | 0.060 mg/L | 0.067 mg/L | NA | NA | 3/Day (at 4 hour intervals) | Grab |
| Dissolved Oxygen | NA | NA | 5.5 mg/L | NA | 1/Day | Grab |
| Temperature | NA | NA | NA | NL °C | 1/Day | IS |
| E. coli | 126 cfu/100 mL (geometric mean) | NA | NA | NA | l/Year* | Grab |
| NL = No Limitation with mon TIRE= totalizing, indicating, | | A = Not Applicable | IS = immersi | on stabilization | *collect one sample pe between 10 am and 4 | |

a. See Part I.C.7 for additional reduced monitoring requirements.

- d. Limits are given with two significant figures.
- e. See Part I.B for additional total residual chlorine requirements.
- f. At least 85% removal for BOD₅ and TSS must be attained for this effluent.
- g. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. The design flow of this treatment facility is 0.60 MGD. See Part I.C.2 for additional flow requirements.

c. See Part I.C.1 for quantification levels and reporting requirements.

A. <u>Limitations and Monitoring Requirements</u>

- 2. Biosolids Limitations and Monitoring Requirements During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids in accordance with 9 VAC 25-31-10 et seq. and as detailed in the approved Sludge Management Plan (SMP). The pollutants in biosolids land applied under this permit shall be limited and monitored by the permittee as specified below:
 - Annual Sludge Production Data
 Report annual total amount of sludge produced, in dry metric tons, including units and annual amount of sludge used or disposed in various methods (if applicable).
 - b. Chemical Pollutant Limitations (In the event that biosolids are not land applied during the year, monitoring for these parameter shall not be required.)

| BIOSOLIDS | <u>LIMITA</u> | <u>TIONS*</u> | MONITORING I | REQUIREMENTS |
|----------------------------|-----------------|--------------------------------|--------------|--------------|
| <u>CHARACTERISTICS</u> | Monthly Average | Ceiling Concentration Maximum | Frequency | Sample Type |
| Percent Solids % | NL | NA | 1/Year | Composite |
| Total Arsenic (mg/kg)** | 41 | 75 | 1/Year | Composite |
| Total Cadmium (mg/kg)** | 39 | 85 | 1/Year | Composite |
| Total Copper (mg/kg)** | 1,500 | 4,300 | 1/Year | Composite |
| Total Lead (mg/kg)** | 300 | 840 | 1/Year | Composite |
| Total Mercury (mg/kg)** | 17 | 57 | 1/Year | Composite |
| Total Molybdenum (mg/kg)** | NA | 75 | 1/Year | Composite |
| Total Nickel (mg/kg)** | 420 | 420 | 1/Year | Composite |
| Total Selenium (mg/kg)** | 100 | 100 | 1/Year | Composite |
| Total Zinc (mg/kg)** | 2,800 | 7,500 | 1/Year | Composite |

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<u>Limitations</u> and Monitoring Requirements A.

2. Biosolids Limitations and Monitoring Requirements

b. Chemical Pollutant Limitations (Continued)

| SLUDGE CHARACTERISTICS | <u>LIMITATIONS *</u> | MONITORING RE | <u>QUIREMENTS</u> |
|---|----------------------|---------------|-------------------|
| | | Frequency*** | Sample Type |
| TKN (mg/kg) | NL | 1/Year | Composite |
| Ammonium Nitrogen (mg/kg) | NL | 1/Year | Composite |
| Nitrate Nitrogen (mg/kg) | NL | 1/Year | Composite |
| Total Phosphorus (P) (mg/kg) | NL | 1/Year | Composite |
| Total Potassium (K) (mg/kg) | NL | 1/Year | Composite |
| pH (Standard Units at 25°C) | NL | 1/Year | Composite |
| Alkalinity as CaCO ₃ , (%) *** | NL | 1/Year | Composite |
| PAN (lbs/dry ton) | NL | 1/Year | Calculated |
| NL = No limitation, monitoring required * = Dry weight basis, unless otherwise | ••• | | |

Pathogen Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable Class B pathogen reduction alternatives specified in 9 VAC 25-31-710.B. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.

For example: Class B, Alternative I, fecal coliform less than either 2,000,000 MPN/g or 2,000,000 CFU/g; or Class B, Alternative 2, anaerobic digestion - Sewage sludge shall be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

Constituents subject to cumulative pollutant loading rates (CPLR), pollutant concentrations (PC), and ceiling limits. (PC biosolids contain the constituents identified above with ** at concentrations below the monthly average specified in Part I.A.2.b. If the concentration of any of these constituents in biosolids from any source exceeds the monthly average concentration, then the biosolids from the source are subject to CPLR rules and tracking (Part I.A.3 and Part I.D.11-15 and Part I.E.3).

Lime treated biosolids (10% or more CaCO₃ by dry weight) should be analyzed for percent Calcium Carbonate Equivalence (CCE).

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A. <u>Limitations and Monitoring Requirements</u>

2. Biosolids Limitations and Monitoring Requirements

- d. Vector Attraction Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable vector attraction reduction alternatives specified in 9 VAC 25-31-720.B. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.
- e. The results of the biosolids monitoring specified above shall be included in the annual report (Part I.D.6). The report shall include a certification statement signed in accordance with Part II.K.
- f. Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.C.3-4 of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in different months during the monitoring period, each monthly average shall be calculated and the highest monthly average reported. Individual results and calculations shall be submitted with the report.
- g. The maximum concentration shall be reported as the highest single result from sampling during a monitoring period. If the concentration of any single sample of biosolids exceeds the Ceiling Limit for any parameter, the biosolids shall not be land applied.
- h. All samples shall be collected and analyzed in accordance with Title 40 Code of Federal Regulations Parts 503 and 136.

A. <u>Limitations and Monitoring Requirements</u>

3. **Biosolids Limitations and Monitoring Requirements** – During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids in accordance with 9 VAC 25-31-10 et seq. and as detailed in the approved Sludge Management Plan.

If the concentration of any of these constituents in biosolids from any source exceeds the monthly average pollutant concentration in Part I.A. then the biosolids from the source are subject to CPLR rules and tracking (Part I.D.11 – 15 and Part I.E.3) and the cumulative pollutant loading at each site shall be limited by the permittee as specified below*:

| | LIMI | <u>TATIONS</u> | | |
|---------------------------|--------------------|--------------------------|----------------------|--------------------|
| BIOSOLIDS CHARACTERISTICS | Maximum Cumulative | Pollutant Loading Rate** | <u>MONITORING RI</u> | <u>EQUIREMENTS</u> |
| | Kg/ha | <u>Lbs/Ac</u> | Frequency | Sample Type |
| Total Arsenic *** | 41 | 36 | Each application | Calculated |
| Total Cadmium *** | 39 | 35 | Each application | Calculated |
| Total Copper *** | 1,500 | 1,340 | Each application | Calculated |
| Total Lead *** | 300 | 270 | Each application | Calculated |
| Total Mercury *** | 17 | 16 | Each application | Calculated |
| Total Molybdenum *** | NA | NA | Each application | Calculated |
| Total Nickel *** | 420 | 375 | Each application | Calculated |
| Total Selenium *** | 100. | 89 | Each application | Calculated |
| Total Zinc *** | 2,800 | 2,500 | Each application | Calculated |

NA = Not applicable

- * = No person shall apply bulk biosolids subject to the cumulative pollutant loading rates identified above to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates identified above has been reached.
- ** = The Cumulative Pollutant Loading Rate is the maximum cumulative application of trace elements that can be applied to soils used for crop production. The maximum cumulative application rate is limited for all ranges of cation exchange capacity due to soil background pH in Virginia of less than 6.5 and lack of regulatory controls of soil pH adjustment after biosolids application ceases.
- *** = Constituents subject to cumulative pollutant loading rates, pollutant concentrations (PC) and ceiling limits. (PC biosolids contain the constituents identified above at concentrations below the monthly average specified in Part I.A.1.)

A. <u>Limitations and Monitoring Requirements</u>

4. **Soil Monitoring Requirements** – During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids according to the Nutrient Management Plan. The pollutants in soil shall be limited and monitored by the permittee as specified below:

| SOILS PARAMETERS | <u>LIMITATIONS</u> | MONITORING REQUIR | REMENTS(**) |
|-------------------------------------|--------------------|-------------------|-------------|
| | | Frequency | Sample Type |
| Soil pH (Standard Units) | NL | 1/3 Years* | Composite |
| Cation Exchange Capacity (meq/100g) | NL | 1/3 Years | Composite |
| Available Phosphorus (mg/kg) | NL | 1/3 Years | Composite |
| Exchangeable Potassium (mg/kg) | NL | 1/3 Years | Composite |
| Exchangeable Magnesium (mg/kg) | NL | 1/3 Years | Composite |

NL = No limitation, monitoring required

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: All land application sites before biosolids is reapplied.
- b. Soil composite samples shall be representative of the soil types delineated by the SCS Soil Survey (or the equivalent). Samples shall be taken at 0-6 inches soil depth for each land application site. Sampling shall be performed as outlined in the Nutrient Management Plan.
- c. Unless otherwise stated, all parameters are reported on a dry weight basis
- d. Results of the soil monitoring specified above shall be used to develop the nutrient management plan in accordance with Part I.D.2.
- e. Soil testing used to develop a Nutrient Management Plan must be conducted by a DCR approved laboratory in accordance with the Virginia Nutrient Management Standards and Criteria.

^{* =} For biosolids with a cadmium concentration greater than or equal to 21 mg/kg the soil pH sample must be less than 1 year old; refer to Part I.F.8.

^{** =} Soil samples shall be collected and analyzed no more than 3 years prior to the biosolids application. This monitoring is only applicable if the permittee land applies biosolids during the permit term.

B. Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements

- 1. The permittee shall monitor TRC at the outlet of the chlorine contact three times per day at four hour intervals by grab sample.
- 2. No more than 9 of total monthly samples taken at the outlet of the chlorine contact tank shall be less than 1.0 mg/L for any one calendar month [DMR Code # 157].
- 3. No TRC sample collected at the outlet of the chlorine contact tank shall be less than 0.60 mg/L [DMR Code # 213].
- 4. If dechlorination facilities exist the samples above shall be collected prior to dechlorination.
- 5. If chlorine disinfection is not used, the permittee shall discontinue TRC monitoring requirements in Part I.A and Part I.B.1 of the permit. Effluent *E. coli* shall be limited and monitored by the permittee as specified below:

| | DISCHARGE LIMIT | | MONITORING REQUIREMENTS | |
|---------|------------------|-------------------|-------------------------|---------------|
| | Monthly Ave OR | Single Sample Max | <u>Frequency</u> | <u>Sample</u> |
| | | | | <u>Type</u> |
| E. coli | 126 cfu / 100 mL | 235 cfu / 100 mL | 3 Days/Week | Grab |
| | (geometric mean) | | between 10 am and 4 pm | |

If four or more samples are collected during a month, report the geometric mean of the results as the average concentration. Report maximum concentration as "NR" (not required).

If there are insufficient data to report a geometric mean (fewer than four samples), report the largest single sample value as the maximum concentration. Report the number of samples exceeding the maximum concentration limit in the "No. Ex." column. Report average concentration as "NR" (not required) and provide an explanation why four weekly samples were not collected.

1. Compliance Reporting

a. The quantification levels (QLs) shall be less than or equal to the following concentrations:

| Effluent Characteristic | Quantification Level |
|-------------------------|----------------------|
| BOD₅ | 5.0 mg/L |
| Chlorine | 0.10 mg/L |
| Total Suspended Solids | 1.0 mg/L |

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

b. Monthly Average

Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the OL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the OL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in 1.a above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

1. Compliance Reporting (Continued)

c. Weekly Average

Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a, of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the OL used for the analysis (QL must be less than or equal to the QL in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data. including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

d. Single Datum

Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

e. Significant Digits

The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up to or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

2. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Blue Ridge Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Blue Ridge Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

3. Indirect Dischargers

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

4. CTC, CTO Requirement

The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9 VAC 25-790), obtain a Certificate to Construct (CTC), and Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner

4. CTC, CTO Requirement (Continued)

to the DEQ regional water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

5. Operations and Maintenance Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment that is in accordance with the Virginia Pollutant Discharge Elimination System Regulations, 9 VAC 25-31 and the Sewage Collection and Treatment Regulations, 9 VAC 25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 signatory requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water, and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;

5. Operations and Maintenance Manual Requirement (Continued)

- e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory, and record keeping;
- f. A plan for the management and/or disposal of waste solids and residues.
- g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
- h. List of facility, local, and state contacts; and
- i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

6. Licensed Operator Requirement

The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has ground for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

7. Effluent Monitoring Frequencies

If the facility permitted herein is issued a Notice of Violation for any of the parameters listed below, then all of the following monitoring frequencies for outfall 001 shall become effective upon written notice from DEQ and remain in effect until permit expiration:

Total Suspended Solids 3 Days/Week BOD₅ 3 Days/Week

No other effluent limitations or monitoring requirements are affected by this special condition.

8. Reliability Class

The permitted treatment works shall meet Reliability Class I requirements.

9. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits, or conditions on the facility that are not consistent with the permit requirements.

10. Water Quality Criteria Monitoring

The permittee shall monitor the effluent at outfall 001 for the substances noted in Attachment A of the permit according to the indicated analysis number, quantification level, sample type, and frequency. Monitoring data shall be collected once during the permit term after April 1, 2016 and no later than April 30, 2017. Using the Attachment as the reporting form, the data shall be submitted on the 10th of the month following sampling but no later than May 10, 2017. Laboratory data summary sheet and chain of custody sheets shall be submitted with Attachment A of the permit to document the laboratory methods used, practicable quantification levels, field collection, and preservation methods. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

11. Treatment Works Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ Blue Ridge Regional Office a closure plan for the existing treatment works. The plan shall address the following information at a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the

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C. Special Conditions

11. Treatment Works Closure Plan (Continued)

work. The plan must be approved by the DEQ prior to implementation. Under an approved closure plan, the permittee may continue discharging until the effluent no longer meets the permit limits or the permit expires, whichever occurs first.

12. Permit Application Requirement

In accordance with Part II.M of the permit, a new and complete permit application shall be submitted for the reissuance of this permit by the following date: **December 7**, 2017.

D. <u>Biosolids Special Condition: Reporting Requirements, Notifications, and Recordkeeping</u>

1. Sludge Management Plan

The permittee shall conduct all biosolids use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the reissuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

2. Nutrient Management Plan

A nutrient management Plan (NMP) shall be developed for each land application site prior to biosolids application. A copy of the NMP shall be present at the land application site during land application operations and available for review by DEQ staff. A copy of the NMP shall be submitted to the DEQ Blue Ridge Regional Office no later than 3 weeks after the land application is completed. Copies of the NMP shall also be provided to the farmer/operator of the site, the Department of Conservation and Recreation (DCR) regional office, and the chief executive officer or designee for the local government, unless they request in writing not to receive the NMP. The NMP shall be enforceable through this permit.

D. <u>Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping</u>

2. Nutrient Management Plan (Continued)

The nutrient management plan shall be prepared and revised by a certified nutrient management planner as stipulated in 4 VAC 5-15-10 et seq. The NMP shall be written in accordance with the criteria stipulated in 4 VAC 5-15-10 et seq. All nutrient management plans shall account for all sources of nutrients to be applied to the site.

Where land application of biosolids is to be performed more frequently than once every three years at greater than 50% of the annual agronomic rate; or where the proposed site is operated by an owner or lessee of a confined animal feeding operation or a confined poultry feeding operation, as defined in subsection A of §62.1-44.17:1 of the Code of Virginia; or where site-specific conditions demonstrate an increased risk to state waters, the permittee shall submit an NMP that has been approved by the DCR with a copy of the approval letter at the time of any permit modification requests to DEQ.

3. Certified Land Applier Requirement

The permittee shall ensure that no land application activities occur unless a certified land applicator (as specified in Article 5 of the VPA Permit Regulation 9 VAC 25-32 (Sections 690 through 760) is onsite at all times during such land application. Certified land applicators may be considered to be onsite if they are at the site permitted for land application and, if it is necessary to leave the site, they are available within 30 minutes to return to the site to verify and ensure that land application of biosolids is in compliance with the permit.

4. Monthly Activity Report

The permittee shall submit, either via hard copy or electronically, a monthly activity report to DEQ's Blue Ridge Regional Office and DEQ's Office of Land Application by the 10th day of the month, for land application activities that occurred in the previous calendar month. This monthly report shall not be required for months when no land application activities occurred. The report shall include the following information:

D. Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping

4. Monthly Activity Report (Continued)

- a. Name of permittee, DEQ permit number, and dates of activity;
- b. Name and certificate number of the certified land applicator(s) with a signed statement attesting that he was onsite at the times of the reported applications and that those applications were in compliance with the permit;
- c. Identification of land application site, including the county where taxes are remitted and permitted site identification name, letters and numbers, as appropriate;
- d. The source of biosolids and approximate field area (reported to the nearest 0.1 acres) receiving those biosolids;
- e. The amount of biosolids applied in dry tons and the method and calculations used to determine the reported value. Dry ton value shall be reported to the nearest 0.01 dry tons;
- f. Dates and type of any interactions with local monitors and names of individuals involved in the interactions;
- g. Name of responsible representative of permittee and a statement signed and dated by that representative indicating that the information submitted has been verified by that representative as correctly reported in accordance with the Part II.K;
- h. Presentation of the calculation of the total fee;
- i. A summary list of the total amount of biosolids applied and the calculated fee broken down by county, presented in alphabetical order by county;
- j. Biosolids Loading -- for each application of biosolids to an application site, the permittee shall submit in the monthly biosolids monitoring report, the concentration of PAN and P₂O₅ (as pounds per dry ton) in the biosolids and the amount of PAN and P₂O₅ (as pounds per acre) applied to the site from the biosolids.

D. <u>Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping</u>

5. Land Application Fee

The permittee shall remit to the DEQ a fee of \$7.50 per dry ton of biosolids applied in the Commonwealth of Virginia.

- a. Upon reviewing the report in Part I.D.4, DEQ will notify the permittee of the fee that is due and set a due date. Failure to submit payment within 60 days of notification by DEQ of the fee due may result in the permit being revoked or approved sources being reclassified as unapproved. This permit shall not be reissued, administratively continued or modified without full payment of any past due fee.
- b. Alternately, the permittee may submit the payment based on the calculation in Part I.D.4 with a copy of the monthly activity report to the address listed in Part I.D.5.c.
- c. The check or money order shall be payable to the "Treasurer of Virginia", and mailed with the invoice to:

Department of Environmental Quality Receipts Control P.O. Box 1104 Richmond, VA 23218

6. Annual Land Application Report

The permittee shall submit an annual report not later than February 19th of each year to the DEQ Blue Ridge Regional Office. Each report is for the previous calendar year's activity. If no biosolids were applied to the land during the reporting period, "no biosolids were applied" shall be reported. The report shall include at minimum:

- a. Monitoring required by Part I.A.2, certified and signed in accordance with Part II.K;
- b. A summary of biosolids disposal contracts currently held with generators, as well as any other biosolids or sludges currently being handled;

D. Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping

6. Annual Land Application Report (Continued)

- c. A summary of approved biosolids storage facilities including the capacity at each facility which is dedicated for a particular biosolids. Provide the amount of remaining storage capacity;
- d. A summary of land application sites completed in the last year including, by county, the source, dry tons, field designation, acres, and the date of last application;
- e. A summary of any partially completed land application sites including the date of last application; and
- f. The total acreage of permitted land application sites available for use in the next calendar year.

7. Landowner Consent and Notice

- a. The permittee shall maintain valid landowner consent forms for all sites not owned by the permittee, as specified in the Sludge Management Plan, and ensure protection from improper concurrent used. The permittee shall provide the owner or leaseholder of the land on which the biosolids is applied notice and necessary information to comply with the requirements in this permit. Attachment A of this permit contains notice and necessary reporting forms for the preparer and land applier of sewage sludge.
- b. New landowner agreements using the most current form provided by the Board, shall be submitted to the Department of Environmental Quality for proposed land application sites identified in each application for modification to add land.
- c. In the event of change of land ownership, the permittee is responsible for obtaining and maintaining valid landowner agreements prior to further land application. The updated land owner agreement must be submitted to DEQ prior to land application and be onsite at the time of land application.

D. <u>Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping</u>

8. 100 Day Notification to the Locality

At least 100 days prior to the first land application of biosolids at a site permitted under the VPA and VPDES Permit regulations, the permit holder shall provide written notification to the local government where the site is located. The notice shall identify the location of the permitted site and the expected sources of the biosolids to be applied to the site. This requirement may be satisfied by providing a list of all available permitted sites in the locality at least 100 days prior to commencing the application at any site on the list. If the site is located in more than one county or city, the notice shall be provided to all jurisdictions where the site is located.

9. 14 Day Notification Prior to Land Application

The permittee shall provide written notification to the DEQ Blue Ridge Regional Office at least 14 days prior to commencing land application of biosolids at each permitted site. The notice shall contain the following information:

- a. Permitted site identification,
- b. Permitted site location, to include:
 - (1) county
 - (2) route number/road name
 - (3) latitude/longitude coordinates in decimal degrees that represent a location within the boundaries of the site
- c. Approximate dates of application, and
- d. Expected sources of biosolids

10. Signage Requirements

At least 48 hours prior to the delivery of biosolids to each land application site, the permittee shall post a sign at the site notifying the public that biosolids will be applied. The sign shall be maintained at the site during the application and for at least 48 hours after the biosolids application has been completed at the site.

a. The sign shall be visible and legible from the public road adjacent to the field, or the intersection of the public road and the main access road or driveway to the site. Upon the request of the permittee, the department may grant a waiver

D. <u>Biosolids Special Conditions: Reporting Requirements</u>, Notifications, and Recordkeeping

10. Signage Requirements (Continued)

to this or any other signage requirement, or require alternative posting options due to extenuating circumstances.

- b. The sign shall be weather-resistant and sturdy enough to remain in place and legible throughout the period that the sign is required at the site. The sign shall be at least four square feet in area and shall only contain the following information:
 - 1) A statement that biosolids are being land-applied at the site;
 - 2) The name and telephone number of the permit holder;
 - The name or title, and telephone number of an individual designated by the permit holder to respond to complaints and inquiries;
 - 4) Contact information for the DEQ Blue Ridge Regional Office, including a telephone number for complaints and inquiries.

11. Recordkeeping for PC and CPLR Biosolids

The permittee is required to retain the following information for at least 5 years:

- a. The concentrations of each pollutant in Part I.A.
- b. A description of how the pathogen reduction requirements in Part I.A are met;
- c. A description of how vector attraction reduction requirements in Part I.A are met;
- d. A description of how the management practices specified in the approved Sludge Management Plan and/or this permit are met;
- e. A description of how site restrictions specified in the approved Sludge Management Plan and/or this permit are met;
- f. The date bulk biosolids are applied to each site.
- g. When submitting the annual land application report or any other reports to DEQ regarding land application activities, the following certification statement shall be included:

D. Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping

11. Recordkeeping for PC and CPLR Biosolids (Continued)

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in 9 VAC 25-31-710 B, the vector attraction reduction requirements in 9 VAC 25-31-720, the management practices in 9 VAC 25-31-550, and the site restrictions (if applicable) for each site on which bulk biosolids are applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fine and imprisonment."

12. Recordkeeping for CPLR Biosolids

For biosolids subject to the cumulative pollutant loading rate, the permittee is required to retain the following information a) through g) indefinitely:

- a. The location, by either street address or latitude and longitude, of each site on which biosolids are applied;
- b. The number of hectares in each site on which biosolids is applied;
- c. The date bulk biosolids are applied to each site;
- d. The cumulative amount of each pollutant (i.e. kilograms) listed in Part I.A.2 in the bulk biosolids applied to each site, including the amount of each pollutant applied since July 20, 1993;
- e. The amount of biosolids (i.e., tons) applied to each site;
- f. A description of how the requirements to obtain information regarding the cumulative pollutant loading rates and the cumulative amount for each pollutant are met;
- g. The following certification statement:
 "I certify under the penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in Part I.D.13 and Part I.D.14 of the VPDES Permit for each site on which bulk biosolids are applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel

D. Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping

12. Recordkeeping for CPLR Biosolids (Continued)

g. properly gather and evaluate this information. I am aware that there are significant penalties for false certification including fine and imprisonment."

13. Reporting Land Application of Biosolids Upon Attaining 90% of CPLR

When 90 percent or more of any of the cumulative pollutant loading rates in Part I.A.3 is reached at a site, the information in Part I.D.12, sections a. - g. shall be reported to the Blue Ridge Regional Office of the Department of Environmental Quality on February 19 of each year for the previous calendar year's activity.

14. CPLR Biosolids Tracking

Once a land application site has received biosolids subject to the cumulative pollutant loading rates listed in Part I A.3, tracking of the cumulative amount of each pollutant shall continue and take into account pollutant inputs from all biosolids, PC and CPLR, applied onto the site.

15. Restrictions and Records for CPLR Biosolids Application to Sites Previously Used

Before biosolids subject to the cumulative pollutant loading rates (CPLR) listed in Part I.A.3 is applied to the land, the permittee shall contact the regional office of the Department of Environmental Quality to determine whether biosolids subject to the cumulative pollutant loading rates has been applied since July 20, 1993.

- a. If biosolids subject to the cumulative amount for each pollutant listed in Part I.A.3 has not been applied since July 20, 1993, the cumulative amount for each pollutant may be applied to the site in accordance with the cumulative loading limits listed in Part I.A.3.
- b. If biosolids subject to the cumulative loading limits in Part I.A has been applied since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the biosolids since that date is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site in accordance with the cumulative loading limits listed in Part I.A.3.

D. <u>Biosolids Special Conditions: Reporting Requirements, Notifications, and Recordkeeping</u>

15. Restrictions and Records for CPLR Biosolids Application to Sites Previously Used (Continued)

c. If biosolids subject to the cumulative loading limits in Part I.A.3. has been applied since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, an additional amount of each pollutant shall not be applied to the site.

E. <u>Biosolids Special Conditions: General Requirements</u>

1. Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

2. Land Application Sites

Biosolids shall be applied only at the sites identified in Sludge Management Plan.

3. Restrictions for CPLR Biosolids Application

Biosolids subject to the cumulative pollutant loading rates (CPLR), listed in Part I.A.3, shall not be applied to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates has been reached.

4. Loading Rates

Application rates shall be based on the annual average sludge quality. The average sludge quality shall be established from the results of approved analytical testing of composite samples obtained during the most recent 12 months of monitoring.

The permittee shall calculate biosolids loading rates based on the most rate limiting factor, specifically plant available nitrogen (PAN), phosphorus (as P₂O₅) or calcium carbonate equivalency (CCE); within the recommendations of the nutrient management plan for the application site and other limiting factors specified in Part I.E.5, Part I.E.6 and Part I.F.2.

E. <u>Biosolids Special Conditions: General Requirements</u>

4. Loading Rates (Continued)

Application rates shall be based on the annual average sludge quality. The average sludge quality shall be established from the results of approved analytical testing of composite samples obtained during the most recent 12 months of monitoring.

The permittee shall calculate biosolids loading rates based on the most rate limiting factor, specifically plant available nitrogen (PAN), phosphorus (as P₂O₅) or calcium carbonate equivalency (CCE); within the recommendations of the nutrient management plan for the application site and other limiting factors specified in Part I.E.5, Part I.E.6 and Part I.F.2.

However, for biosolids subject to the cumulative pollutant loading rate, the biosolids application shall be restricted by the metals content of the biosolids if the cumulative pollutant loading rate at the site is approached or if the ceiling limit of the biosolids is reached, unless the nutrient management plan specifies more restrictive biosolids application rates based on the nutrient content or CCE of the biosolids.

5. Infrequent Land Application Restrictions

Land application sites receiving infrequent biosolids applications shall receive a complete biosolids application no more than once in three years.

- a. For the purposes of this special condition, a complete biosolids application shall be defined as the sum of all biosolids applications made within a 12 month period, regardless of whether or not the full agronomic rate was applied.
- b. Prior to any subsequent land application, the Nutrient Management Plan shall be updated using soil sampling test results, in accordance with Part I.A.4, that are the most recent, but not more than 3 years old; and
- c. The rate of biosolids application shall never exceed 15 dry tons per acre per three years.

6. Frequent Land Application Restrictions

Land application sites receiving frequent, below agronomic rate biosolids applications shall receive biosolids more frequently than once every three years at reduced rates as specified below:

E. <u>Biosolids Special Conditions: General Requirements</u>

6. Frequent Land Application Restrictions (Continued)

- a. The application of biosolids together with any other source of PAN shall not exceed 70% of the agronomic loading rate for the crops, including permanent pasture or hay, grown on each site.
- b. The 70% application rate shall be calculated after accounting for the previous two years' applied biosolids nitrogen mineralization rates.
- c. When a maximum of 50% of the nitrogen requirement of the permanent pasture or hay crop is applied on an annual basis, it is not necessary to account for the previous two years' applied biosolids nitrogen mineralization rates; and
- d. The rate of biosolids application shall never exceed 15 dry tons per acre per year.

F. <u>Biosolids Special Conditions: Field Operations</u>

1. Threatened or Endangered Species

Sewage Sludge shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed in the Water Quality Standards Regulation (9 VAC25-260-320) or § 4 of the Endangered Species Act (16 USC § 1533) or if the land application is likely to adversely affect its designated critical habitat.

2. Liquid Application Rate Limitation

At no time shall liquid biosolids (<15% total solids) be surface applied at a hydraulic loading rate greater than 14,000 gal/ac (0.5 inches depth) in a single application procedure. Sufficient drying time shall be allowed between subsequent applications.

3. Operational Limitations During Periods of Inclement Weather

- a. Biosolids shall not be applied during times when the ground is saturated.
- b. Surface application of biosolids shall not be made to cultivated or bare ground covered with ice. However, biosolids may be applied to snow covered ground if snow cover does not exceed an average depth of one inch and the snow and biosolids are incorporated within 24 hours of application.

F. Biosolids Special Conditions: Field Operations

3. Operational Limitations During Periods of Inclement Weather (Continued)

- c. Biosolids may be applied to frozen ground only under the following conditions:
 - (1) solids content of the biosolids is greater than 15%.
 - (2) slopes are not greater than 5%,
 - (3) a minimum of a 200 foot vegetative (or at least 60% uniformly covered by stalks or other vegetation) buffer is maintained from all surface water courses.
 - (4) only those soils characterized by the USDA as "well drained" are utilized,
 - (5) stalks, vines, stubble or other vegetation or crop residue provides uniform soil coverage of at least 60% and is sufficient to prevent surface runoff.

4. Injection or Incorporation Requirement

Biosolids shall be direct injected or incorporated (mixed within the normal plow layer) within 48 hours if applied on sites with less than 60% uniform soil coverage by crop residue, stalks, vines, stubble, or other vegetation within any portion of the permitted site or if applied to areas subject to frequent flooding as defined by soil survey information.

5. Slope Restrictions

- a. Biosolids shall not be applied to sites where slopes exceed 15%. During the period of November 16 to March 15 of the following year, when biosolids is applied to site slopes between 7% and 15%, one of the following best management practices shall be used to prevent runoff and soil loss:
 - (1) Biosolids is surfaced applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
 - (2) Biosolids is surfaced applied or subsurface injected so that immediately after application the crop residue still provides at least 60% soil surface coverage; or

F. <u>Biosolids Special Conditions</u>: Field Operations

5. Slope Restrictions (Continued)

- (3) Biosolids is applied by surface application or subsurface injection and the site is operated in compliance with an existing soil conservation plan approved by the USDA Natural Resource Conservation Service and will remain in compliance after any subsequent tillage operation to incorporate the biosolids.
- b. During the period of November 16 to March 15 of the following year, if site slopes between 5% and 7%, biosolids can be applied by surface application or subsurface injection followed by:
 - (1) Biosolids are surface applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
 - (2) Incorporation within 48 hours of application if crop residue still provides at least 30% soil surface coverage immediately following incorporation; or
 - (3) Ridge tilling or chisel plowing within 48 hours of application.

6. Transport Vehicles

All vehicles that transport biosolids shall be sufficiently sealed to prevent leaking and spillage of biosolids. Totally closed, water tight transport vehicles with rigid tops shall be provided for liquid biosolids to prevent spillage.

7. Buffer Zones

Land application of biosolids shall not occur within the following minimum buffer zones:

| . \ | Minimum Distance (feet)to Land Application Area | | | |
|--------------------------------|---|---------------|-----------------------|--|
| Adjacent Features | Surface Application ⁽¹⁾ | Incorporation | Winter ⁽²⁾ | |
| Occupied dwellings * | 200 | 200 | 200 | |
| Water supply wells and springs | 100 | 100 | 100 | |
| Property lines * | 100 | 50 | 100 | |

F. <u>Biosolids Special Conditions: Field Operations</u>

7. Buffer Zones (Continued)

| | Minimum Distance (feet)to Land Application Area | | | |
|--|---|---------------|-----------------------|--|
| Adjacent Features | Surface Application ⁽¹⁾ | Incorporation | Winter ⁽²⁾ | |
| Occupied buildings on publicly accessible sites ³ | 400 | 400 | 400 | |
| Property lines of publicly accessible sites ³ | 200 | 200 | 200 | |
| Perennial streams and other surface waters except intermittent streams | 50 | 35 | 100 | |
| Intermittent streams/drainage ditches | 25 | 25 | 50 | |
| All improved roadways | 10 | 5 | 10 | |
| Rock outcrops and sinkholes | 25 | 25 | 25 | |
| Agricultural drainage ditches with slopes equal to or less than 2.0% | 10 | 5 | 10 | |

- (1) Not plowed or disked to incorporate within 48 hours.
- (2) If surface application occurs on average site slope greater than 7% during the time between November 16 of one year and March 15 of the following year
- Publicly accessible sites are open to the general public and routinely accommodate pedestrians and include, but are not limited to, schools, churches, hospitals, parks, nature trails, businesses and sidewalks. Temporary structures, public roads or similar thoroughfares are not considered publicly accessible.

8. Cadmium and Soil pH

If the cadmium concentration of the biosolids is greater than 21 mg/kg, post application soil pH shall be 6.0 S.U. or greater. If the pre-application soil pH is below 6.0 S.U., land application of lime, in addition to that which may be contained in the biosolids may be required in order to obtain a pH of 6.0 S.U. or greater after application of biosolids. If additional lime is needed, the calculation of lime application rate shall consider the Calcium Carbonate Equivalency (CCE) of the biosolids at the proposed biosolids application site. The soil analysis to determine pre-application soil pH shall not be greater than 1 year old at the time of land application.

F. <u>Biosolids Special Conditions</u>: Field Operations

9. Site Restrictions for Land Application of Class B Biosolids

- a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids;
- b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil;
- c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil;
- d. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids;
- e. Animals shall not be allowed to graze on the land for 30 days after application of biosolids;
- f. Lactating dairy livestock shall not be allowed on sites within 60 days following biosolids application and green chopped forage from the site shall not be fed to milk cows if forage is removed within 60 days following biosolids application.
- g. Turf grown on land where biosolids is applied shall not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;
- h. Public access to land with a high potential for public exposure shall be restricted for one year after application of biosolids;
- i. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

F. <u>Biosolids Special Conditions: Field Operations</u>

10. Biosolids Storage Requirements

a. Emergency Storage

The owner shall notify the DEQ Blue Ridge Regional Office upon implementation of any emergency storage. Emergency storage may be implemented due to unforeseen circumstances, including the delivery of sludge which has not been stabilized to biosolids standards. The biosolids in emergency storage shall be managed in accordance with the O&M Manual and shall not result in water quality, public health or nuisance problems.

b. Temporary Storage

The owner shall notify the DEQ Blue Ridge Regional Office upon implementation of any temporary storage. Temporary storage may be implemented due to unforeseen climatic factors that prevent land application of biosolids on a site on the same day that the biosolids has been offloaded at the site or is in transit to the site. Temporary storage is restricted as follows:

- (1) Biosolids stored at the site shall be land applied prior to additional offloading of biosolids at the same site;
- (2) The owner shall be restricted to storing a daily maximum amount of 100 wet tons per operational site;
- (3) The stored biosolids shall be land applied within 30 days from the initiation of storage or moved to a routine biosolids facility;
- (4) Approval of plans for temporary storage will be considered as part of the overall operations and maintenance manual;
- (5) Temporary storage shall not occur in areas prone to flooding at a 25-year or less frequency interval;
- (6) A synthetic liner shall be required for placement under and over biosolids stored in this manner with one exception: where biosolids is stockpiled for less than seven days, a liner placed under the stored biosolids is not required. Surface water diversions and other best management provisions (BMP) should be utilized as appropriate; and

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F. Biosolids Special Conditions: Field Operations

10. Biosolids Storage Requirements (Continued)

- (7) Temporary storage shall not result in water quality, public health or nuisance problems.
- c. Field Storage

Variances to temporary storage issued by the Virginia Department of Health allowing "Field Storage" shall remain in effect until this permit is modified or revoked and reissued to include other special conditions to address field storage. The biosolids in field storage shall be managed in accordance with the *Variance to Temporary Storage* authorized by the Commissioner of Health and shall not result in water quality, public health or nuisance problems.

The permittee's conditional pretreatment program has been approved and shall be upgraded to a full program by complying with conditions 6, 8, and 10 below. The program is an enforceable part of this permit. The permittee shall:

- 1. Implement a pretreatment program that complies with the Clean Water Act, Water Control Law, State regulations and the approved program.
- 2. Submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than **January 31 of each year** and shall include:
 - a. An updated list of Significant Industrial Users* showing the categorical standards and local limits applicable to each;
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirement;
 - c. A summary of the numbers and types of Significant Industrial User sampling and inspections performed by the POTW;
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and the enforcement actions taken to alleviate said events;
 - e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months;
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office;
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report;
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period;
 - i. Results of the POTW's influent, effluent, and sludge sampling not previously submitted to DEQ;

- j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period (due no later than March 31 of each year);
- k. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period (due no later than March 31 of each year);
- 1. Signature of authorized representative.
- 3. Within 180 days of the effective date of this permit, submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of Significant Industrial Users of the POTW.
- 4. Submit any changes to the approved pretreatment program to the DEQ Regional Office, and obtain approval before implementation of the changes.
- 5. Ensure that all Significant Industrial Users' permits are issued/reissued in a timely manner by the POTW and are effective and enforceable.
- 6. **Within three years** of the effective date of this permit, develop and submit procedures for full implementation. The procedures must address all pretreatment program requirements, including the inspection and sampling of all Significant Industrial Users.

Once the program procedures are approved, inspect and sample all Significant Industrial Users in accordance with the procedures:

- a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged;
- b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention control procedures, hazardous waste generation, and Significant Industrial User's self-monitoring and records.
- 7. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.

- 8. **Within three years** of the effective date of this permit, develop and submit an Enforcement Response Plan (ERP) that meets State and Federal regulatory requirements. Once approved, the ERP shall be an enforceable part of this permit and shall be implemented.
- 9. Develop local limits or reevaluate local limits using current influent, effluent, and sludge monitoring data and submit the data and results of the evaluation to the DEQ Regional Office within one year of the effective or modification date of the permit. All Significant Industrial Users shall be sampled at the end of any categorical process and at the entrance to the treatment works.
- 10. **Within three years** of the effective date of this permit, provide documentation that the Town has adequate funding and resources available to implement the full (upgraded) pretreatment program. The documentation shall identify the program organization and staffing.
- 11. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.
- 12. In lieu of the survey, the permittee may elect to develop, submit for approval and implement the plan to continuously survey the industrial community in the permittee's jurisdiction.
- 13. The DEQ may require the POTW to institute changes to its pretreatment program:
 - a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law, or State Regulations;
 - b. If problems such as pass-through, interference, Water Quality Standards violations, or sludge contamination develop or continue; and
 - c. If Federal, State or local requirements change.

- 14. Should DEQ determine that the permittee is not required to have a pretreatment program, the implementation requirement described above may be suspended by DEQ.
 - * A significant industrial user is one that:
 - 1. Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
 - 2. Contributes a process waste stream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
 - 3. Is subject to the categorical pretreatment standards; or
 - 4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.
 - ** Excludes sanitary, non-contact cooling water, and boiler blowdown.

H. <u>Toxics Management Program</u>

1. Biological Monitoring

a. In accordance with the schedule in 2, below, the permittee shall conduct annual acute and chronic toxicity tests for the duration of the permit. The permittee shall collect 24-hour flow-proportioned composite samples of final effluent from outfall 001. The acute test to use is:

48 Hour Static Acute test using Pimephales promelas

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} . Express the result as TU_a (acute toxic units) by dividing $100/LC_{50}$ for DMR reporting.

The chronic test to use is:

Chronic 7-day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (chronic toxic units), by dividing 100/NOEC for DMR reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The test dilutions should be able to determine compliance with the following endpoints:
 - (1) Acute LC₅₀ of 62% equivalent to a TU_a of 1.61.
 - (2) Chronic NOEC of 7% equivalent to a TU_c of 14.28.

H. Toxics Management Program

1. Biological Monitoring (Continued)

c. The test data will be evaluated by the Agency's STATS program for reasonable potential at the conclusion of test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicated that a limit is needed a Whole Effluent Toxicity (WET) limit and compliance schedule will be required and the toxicity tests of 1.a may be discontinued.

2. Reporting Schedule:

The permittee submit a copy of the toxicity test reports specified in this Toxics Management Program in accordance with the following schedule:

| <u>Period</u> | Compliance Periods | DMR Report Submission Dates |
|---------------|--------------------|-----------------------------|
| Annual 1 | By 9/30/2014 | 11/10/2014 |
| Annual 2 | By 9/30/2015 | 11/10/2015 |
| Annual 3 | By 9/30/2016 | 11/10/2016 |
| Annual 4 | By 9/30/2017 | 11/10/2017 |
| Annual 5 | By 5/30/2018 | 06/10/2018 |

PART II - CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. Samples taken as required by this permit shall be analyzed in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Environmental Quality Blue Ridge Regional Office 3019 Peters Creek Road Roanoke VA 24019-2738

Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

C. Reporting Monitoring Results (Continued)

- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
- 4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. <u>Duty to Provide Information</u>

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. <u>Compliance Schedule Reports</u>

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

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G. Reports of Unauthorized Discharges (Continued)

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II 12. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

I. Reports of Noncompliance (Continued)

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (540) 562-6700 (voice) or (540) 562-6725 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

- 1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

K. <u>Signatory Requirements (Continued)</u>

4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. <u>Duty to Comply</u>

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

U. <u>Bypass (Continued)</u>

- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (3) The permittee submitted notices as required under Part II U 2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II I; and
 - d. The permittee complied with any remedial measures required under Part II S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

W. <u>Inspection and Entry (Continued)</u>

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. <u>Transfer of permits</u>

- 1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

ATTACHMENT A DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:

http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|------------|-----------------------------|---------------------|--|----------------------|-------------------------------|---------------------|
| | | META | ALS | | | |
| 7440-36-0 | Antimony, dissolved | (3) | 20 | | G or C | 1/5 YR |
| 7440-38-2 | Arsenic, dissolved | (3) | 20 | | G or C | 1/5 YR |
| 7440-41-7 | Beryllium, dissolved | (3) | (4) | | G or C | 1/5 YR |
| 7440-43-9 | Cadmium, dissolved | (3) | 3.0 | | G or C | 1/5 YR |
| 16065-83-1 | Chromium III, dissolved (6) | (3) | 10 | | G or C | 1/5 YR |
| 18540-29-9 | Chromium VI, dissolved (6) | (3) | 10 | | G or C | 1/5 YR |
| 7440-50-8 | Copper, dissolved | (3) | 5.0 | | G or C | 1/5 YR |
| 7439-92-1 | Lead, dissolved | (3) | 10 | | G or C | 1/5 YR |
| 7439-97-6 | Mercury, dissolved | (3) | 3 | | G or C | 1/5 YR |
| 7440-02-0 | Nickel, dissolved | (3) | 10 | | G or C | 1/5 YR |
| 7782-49-2 | Selenium, Total Recoverable | (3) | 10 | | G or C | 1/5 YR |
| 7440-22-4 | Silver, dissolved | (3) | 1.0 | | G or C | 1/5 YR |
| 7440-28-0 | Thallium, dissolved | (3) | (4) | | G or C | 1/5 YR |
| 7440-66-6 | Zinc, dissolved | (3) | 50 | | G or C | 1/5 YR |
| W 60 | BASE | NEUTRAL E | XTRACTA | BLES | <u></u> | · · |
| 83-32-9 | Acenaphthene | 610/625 | , 10.0 | | G or C | 1/5 YR |
| 208-96-5 | Acenaphthylene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 120-12-7 | Anthracene | 610/625 | 10.0 | - | G or C | 1/5 YR |
| 92-87-5 | Benzidine | 625 | (4) | | G or C | 1/5 YR |
| 56-55-3 | Benzo (a) anthracene | 610/625 | 10.0 | <u> </u> | G or C | 1/5 YR |

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|-----------|--|---------------------|--|---|-------------------------------|---------------------|
| | BASE N | EUTRAL E | XTRACTAL | BLES | | |
| 50-32-8 | Benzo(a)pyrene | 610/625 | 10.0 | | G or C | 1/5YR |
| 205-99-2 | 3,4 Benzo-fluoranthene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 191-24-2 | Benzo (GHI) Perylene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 207-08-9 | Benzo (K) Fluoranthene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 111-91-1 | Bis 2-Chloroethoxy Methane | 610/625 | 10.0 | | G or C | 1/5 YR |
| 111-44-4 | Bis 2-Chloroethyl Ether | 625 | (4) | | G or C | 1/5 YR |
| 108-60-1 | Bis 2-Chloroisopropyl Ether | 625 | (4) | | G or C | 1/5 YR |
| 117-81-7 | Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate) | 625 | 10.0 | | GorC | 1/5 YR |
| 101-55-3 | 4-Bromophenyl Phenyl Ether | 625 | (4) | | G or C | 1/5 YR |
| 85-68-7 | Butyl benzyl phthalate | 625 | 10.0 | | G or C | 1/5 YR |
| 91-58-7 | 2-Chloronaphthalene | 625 | (4) | | G or C | 1/5 YR |
| 7005-72-3 | 4-Chlorophenyl Phenyl Ether | 625 | (4) | | G or C | 1/5 YR |
| 218-01-9 | Chrysene | 610/625 | 10.0 | | GorC | 1/5 YR |
| 53-70-3 | Dibenzo (a,h) anthracene | 610/625 | 20.0 | | G or C | 1/5 YR |
| 95-50-1 | 1,2-Dichlorobenzene | 602/624 | 10.0 | | G or C | 1/5 YR |
| 541-73-1 | 1,3-Dichlorobenzene | 602/624 | 10.0 | | G or C | 1/5 YR |
| 106-46-7 | 1,4-Dichlorobenzene | 602/624 | 10.0 | | G or C | 1/5 YR |
| 91-94-1 | 3,3-Dichlorobenzidine | 625 | (4) | | G or C | 1/5 YR |
| 84-66-2 | Diethyl phthalate | 625 | 10.0 | | G or C | 1/5 YR |
| 131-11-3 | Dimethyl phthalate | 625 | (4) | | G or C | 1/5 YR |
| 84-74-2 | Di-n-butyl Phthalate (synonym = Dibutyl Phthalate) | 625 | 10.0 | | G or C | 1/5 YR |
| 121-14-2 | 2,4-Dinitrotoluene | 625 | 10.0 | | G or C | 1/5 YR |
| 606-20-2 | 2,6-Dinitrotoluene | 625 | (4) | | G or C | 1/5 YR |
| 122-66-7 | 1,2-Diphenylhydrazine | 625/ 8270C/8270D | (4) | - | GorC | 1/5 YR |
| 206-44-0 | Fluoranthene | 610/625 | 10.0 | <u> </u> | G or C | 1/5 YR |
| 86-73-7 | Fluorene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 118-74-1 | Hexachlorobenzene | 625 | (4) | | G or C | 1/5 YR |
| 87-68-3 | Hexachlorobutadiene | 625 | (4) | <u>, </u> | G or C | 1/5 YR |
| 77-47-4 | Hexachlorocyclopentadiene | 625 | (4) | | G or C | 1/5 YR |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|----------|--|---------------------|--|----------------------|-------------------------------|---------------------|
| | BASE N | EUTRAL E | XTRACTA | BLES | | |
| 67-72-1 | Hexachloroethane | 625 | (4) | | G or C | 1/5 YR |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 610/625 | 20.0 | | G or C | 1/5 YR |
| 78-59-1 | Isophorone | 625 | 10.0 | | G or C | 1/5 YR |
| 91-20-3 | Naphthalene | (3) | (4) | | G or C | 1/5 YR |
| 98-95-3 | Nitrobenzene | 625 | 10.0 | | G or C | 1/5 YR |
| 621-64-7 | N-Nitrosodi-n-propylamine | 625 | (4) | | G or C | 1/5 YR |
| 86-30-6 | N-Nitrosodiphenylamine | 625 | (4) | | G or C | 1/5 YR |
| 85-01-8 | Phenanthrene | (3) | (4) | | G or C | 1/5 YR |
| 129-00-0 | Pyrene | 610/625 | 10.0 | | G or C | 1/5 YR |
| 120-82-1 | 1,2,4-Trichlorobenzene | 625 | 10.0 | | G or C | 1/5 YR |
| | | VOLAT | ILES | <u> </u> | | " |
| 107-02-8 | Acrolein | 624 | (4) | | G | 1/5 YR |
| 107-13-1 | Acrylonitrile | 624 | (4) | | G | 1/5 YR |
| 71-43-2 | Benzene | 602/624 | 10.0 | | G | 1/5 YR |
| 75-25-2 | Bromoform | 624 | 10.0 | | G | 1/5 YR |
| 56-23-5 | Carbon Tetrachloride | 624 | 10.0 | | G | 1/5 YR |
| 108-90-7 | Chlorobenzene (synonym = Monochlorobenzene) | 602/624 | 50.0 | | G | 1/5 YR |
| 124-48-1 | Chlorodibromomethane | 624 | 10.0 | | G | 1/5 YR |
| 75-00-3 | Chloroethane | (3) | (4) | · | G | 1/5 YR |
| 110-75-8 | 2-Chloro-Ethylvinyl Ether | (3) | (4) | | G | 1/5 YR |
| 67-66-3 | Chloroform | 624 | 10.0 | | G | 1/5 YR |
| 75-27-4 | Dichlorobromomethane | 624 | 10.0 | | G | 1/5 YR |
| 75-34-3 | 1,1-Dichloroethane | (3) | (4) | | G | 1/5 YR |
| 107-06-2 | 1,2-Dichloroethane | 624 | 10.0 | | G | 1/5 YR |
| 75-35-4 | 1,1-Dichloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 156-60-5 | 1,2-trans-dichloroethylene | 624 | (4) | | G | 1/5 YR |
| 78-87-5 | 1,2-Dichloropropane | 624 | (4) | | G | 1/5 YR |
| 542-75-6 | 1,3-Dichloropropene | 624 | (4) | | G | 1/5 TR |
| 100-41-4 | Ethylbenzene | 602/624 | 10.0 | | G | 1/5 YR 1/5 YR |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENC |
|-----------|--|---------------------|--|----------------------|-------------------------------|--------------------|
| | | VOLAT | ILES | | | |
| 74-83-9 | Methyl Bromide (synonym = Bromomethane) | 624 | (4) | | G [°] | 1/5 YR |
| 74-87-3 | Methyl Chloride | (3) | (4) | | G | 1/5 YR |
| 75-09-2 | Methylene Chloride (synonym = Dichloromethane) | 624 | 20.0 | | G | 1/5 YR |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 624 | (4) | | G | 1/5 YR |
| 127-18-4 | Tetrachloroethylene (synonym = Tetrachloroethene) | 624 | 10.0 | | G | 1/5 YR |
| 10-88-3 | Toluene | 602/624 | 10.0 | | G | 1/5 YR |
| 79-00-5 | 1,1,2-Trichloroethane | 624 | (4) | | G | 1/5 YR |
| 79-01-6 | Trichloroethylene (synonym = Trichloroethene) | 624 | 10.0 | | G | 1/5 YR |
| 75-01-4 | Vinyl Chloride | 624 | 10.0 | | G | 1/5 YR |
| | A | CID EXTRA | CTABLES | | | |
| 59-50-7 | p-Chloro-m-Cresol | 625 | 10.0 | | G or C | 1/5 YR |
| 95-57-8 | 2-Chlorophenol | 625 | 10.0 | | GorC | 1/5 YR |
| 120-83-2 | 2,4 Dichlorophenol | 625 | 10.0 | | G or C | 1/5 YR |
| 105-67-9 | 2,4 Dimethylphenol | 625 | 10.0 | · | G or C | 1/5 YR |
| 534-52-1 | 4,6 Dinitro-o-Cresol | 625 | (4) | | GorC | 1/5 YR |
| 51-28-5 | 2,4-Dinitrophenol | 625 | (4) | | G or C | 1/5 YR |
| 88-75-5 | 2-Dinitrophenol | 625 | (4) | | G or C | 1/5 YR |
| 100-02-7 | 4-Nitrophenol | 625 | (4) | | G or C | 1/5 YR |
| 87-86-5 | Pentachlorophenol | 625 | 50.0 | - 3- | G or C | 1/5 YR |
| 108-95-2 | Phenol | 625 | 10.0 | | G or C | 1/5 YR |
| 88-06-2 | 2,4,6-Trichlorophenol | 625 | 10.0 | — +- <u>-</u> | G or C | 1/5 YR |
| | | MISCELLA | NEOUS | <u>'</u> | <u>-</u> | |
| 776-41-7 | Ammonia as NH3-N | 350.1 | 200 | | С | 1/5 YR |
| 57-12-5 | Cyanide, Free (7) | ASTM 4282-02 | 10.0 | | G | 1/5 YR |
| | Dissolved Oxygen | (3) | (4) | | G | 1/5 YR |
| | Total Kjeldahl Nitrogen | (3) | (4) | <u> </u> | G or C | 1/5 YR |
| · · · · | Oil and Grease | (3) | 5.0 | | G | 1/5 YR |
| 7723-14-0 | Phosphorus (Total) | (3) | (4) | | G | 1/5 YR |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|-------|-------------------------------|---------------------|--|----------------------|-------------------------------|---------------------|
| | Nitrate Plus Nitrite Nitrogen | (3) | (4) | | G or C | 1/5 YR |
| | Total Dissolved Solids (mg/L) | (3) | (4) | | С | 1/5 YR |
| - | Total Phenolic Compounds | (4) | (4) | | G or C | 1/5 YR |

Name of Principal Executive Officer or Authorized Agent & Title

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

- (3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.
- (4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].
- (6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (7) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

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ATTACHMENT B NOTICE AND NECESSARY INFORMATION Part 1 – To Be Completed by PREPARERS of Sewage Sludge

This form is to assist compliance with the bulk sewage sludge notification requirements (9 VAC 25-31-530 F and/or H). Please note, however, that if the sewage sludge meets the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders. The facility may also choose to provide a form, provided that all information on this attachment is present on the form used.

A. Please provide pollutant concentrations

| Name | Concentration | Pollutant Concentrations | Ceiling Concentrations* |
|----------------|---------------|----------------------------|----------------------------|
| | (mg/kg) | (Table 3, 9 VAC 25-31-540) | (Table 1, 9 VAC 25-31-540) |
| | Dry Weight | (Monthly Average) | (Daily Maximum) |
| Arsenic | | 41 mg/kg | 75 mg/kg |
| Cadmium | | 39 mg/kg | 85 mg/kg |
| Copper | | 1500 mg/kg | 4300 mg/kg |
| Lead | | 300 mg/kg | 840 mg/kg |
| Mercury | | 17 mg/kg | 57 mg/kg |
| Molybdenum | | - | 75 mg/kg |
| Nickel | | 420 mg/kg | 420 mg/kg |
| Selenium | | 100 mg/kg | 100 mg/kg |
| Zinc | | 2800 mg/kg | 7500 mg/kg |
| Total Nitrogen | | N/A | N/A |

B. Pathogen Reduction (9 VAC 25-31-710) Class A __ Class B C. Vector Attraction Reduction (9 VAC 25-31-720) __ Option 2 __ Option 3 Option 1 Option 4 Option 6 Option 7 __ Option 5 Option 8 __ No vector attraction reduction options were performed D. Certification I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons

Sludge may not be land applied if any pollutant exceeds these values.

there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title:

Signature:

Date:

Telephone number: ()

who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that

Permit No. VA0022985 Attachment B Page 2 of 2

ATTACHMENT B (Continued)

Part II - To Be Completed by LAND APPLIER of Sewage Sludge

If the pollutant levels in the sewage sludge do not meet the pollutant concentration limits in Part I A of this attachment, then the land applier must provide the land owner with the following information:

- Location of land application site
- Number of hectares where the sewage sludge was applied
- Date and time bulk sewage sludge was applied
- Amount of bulk sewage sludge applied Record the amount of each metal and nit

| • | Record the amount of each metal and nitrogen applied in pounds per acre or kilogram per hectare |
|----|---|
| A. | If the preparer did not perform vector attraction reduction options (see Part I), then either option 9 or 10 must be performed by the land applier. Please indicate if option 9 or 10 was performed. |
| | Option 9 - Subsurface Injection Option 10 - Incorporated into the soil N/A |
| В. | Certification |
| | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |
| | Name and official title: |
| | Signature: Date Signed: |
| | Telephone number: |